THE EIGHTEENTH

Annual Report

ON THE

Health and Sanitary Condition

OF THE

URBAN DISTRICT OF DESBOROUGH,

FOR

1909,

BY

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Desborough,

February 16th, 1910.

THE DESBOROUGH URBAN DISTRICT COUNCIL.

Gentlemen,

I have the honour of submitting to you my Eighteenth Annual Report for the year ended December 31st, 1909.

The population to the middle of 1909 has been estimated as 4,200.

Births and Birth-rate.

The number of births registered during the year was 121—legitimate 120, illegitimate 1—or one less than than that recorded for the previous year, and furnishing a birth-rate of 28·8 per 1,000 living.

In my last Annual Report I referred to the birth-rate of 29·6 then presented as the highest for several years, and expressed the hope that it would be the forerunner of more satisfactory records, but it will now be observed that, unfortunately, that hope has so far not been realised. There is, however, the consolation that the lower rate is still above the average for the years 1899-1908, which was 27·6.

Of the births registered 59 were boys and 62 girls.

General Mortality.

The deaths registered in the district numbered 48—24 males and 24 females—equivalent to a death-rate of 11·42 per 1,000 living; but there have to be considered besides the deaths of two residents which occurred in

public institutions beyond the district, making a total of 50 deaths—25 males and 25 females—and a nett death-rate of 11·9.

A comparison of these figures with those of the previous year, when the deaths and death-rate were 62 and 15·0 respectively, shews that the decline in the general mortality for the year 1909 was marked and most satisfactory, and below the average for the decennium 1899-1908.

Of the causes of mortality Epidemic Influenza, Phthisis, other Tubercular diseases, Cancer, Pneumonia, and Heart Diseases were prominent factors. Accidents were responsible for two deaths—one a case of overlying.

Infantile Mortality.

The total number of deaths below one year was 16, and included that of an illegitimate infant, giving an infant rate of mortality of 132 deaths to the 1,000 births registered. This is a rate far too high—not only above that for 1908 and the previous ten years' average, but the highest recorded since the year 1899, when the ratio was 259 to 1,000 births registered.

On referring to Table V. herewith appended, it will be observed that wasting diseases, which are so closely associated with the improper feeding of infants, were responsible for more than half of the deaths, and further that almost 50 per cent. of the total deaths occurred below the age of one month. Besides, of the total number of deaths at all ages which occurred in the district fully a third were of children below the age of one year.

All these facts afford material for serious reflection. It is therefore none too soon that practical interest in the matter is being shown by the public and the Sanitary Authorities—some of the latter having appointed Female Health Visitors with the view of preventing infant mortality.

In this connection I gladly take the opportunity of testifying to the excellent work being accomplished in the parish by the Female Health Visitor, whose services have been extended by the County Council to this district.

It is perhaps too early to expect the harvest from the good seed sown, but that it will be bountiful in due course I have no doubt. Already signs are not wanting of the good effects of the Visitor's teaching, as evidenced by the intelligent and scientific interest taken in the babies by the mothers—especially the younger ones—and keen appreciation of her visits.

Phthisis.

The number of deaths registered as due to Phthisis or Consumption was two—both females and above the age of five years—giving a death-rate for this disease of ·47 per thousand compared with 4 and ·97 respectively, the figures for the previous year.

It is most gratifying to be able to report that the decline in the death-rate from this malady was strikingly maintained during the year 1909. But in spite of this fact, an optimistic view, both as regards its mortality and prevalence, cannot be entertained. In the science of preserving health, pure air is an indispensable principle; and just in proportion to the confinement of a population

in indifferently ventilated workshops is found its liability to consumption. Thus in a district such as this, where the great majority of the workers are engaged in factories, cases, incipient and advanced, are lamentably common, and the outlook for the unfortunate sufferers is anything but hopeful. The greater healthfulness of occupations that are carried on in the open air, as compared with workshop life, is clearly demonstrated by cases occurring in this parish, where factory operatives, the victims of consumption in its early stages, have been cured by leaving the factory and taking to iron-stone work. But unfortunately this latter form of occupation is limited in opportunity owing to the greater physical development required on the part of those engaged in it. The importance of pure air cannot be too strongly urged; it vitally concerns the health of the people not only in their working hours but also in their homes. Adequate ventilation is as necessary in living-rooms and bedrooms as in factories. Once this principle is fully realised and put into general practice we shall have made a great step in the direction of eradicating one of the worst scourges of humanity.

Having in view the excellent memorandum of the Medical Officer of the Local Government Board, relative to Tuberculosis, it appears to me that were the Council as a whole or some of its members to take the initiative in bringing about a meeting of all the parishioners interested in the matter of Pulmonary Tuberculosis, there would be no difficulty in forming a strong central group of persons anxious to receive instruction on the subject, and to disseminate the knowledge thereby obtained throughout the parish, special attention being devoted

to the cases of the disease in question that might come under their notice.

There were three notifications received under the Public Health Act (Tuberculosis) Regulations of the Local Government Board, and they obtained from your officers due attention.

Respiratory Diseases.

Bronchitis and Pneumonia were responsible for four deaths—equivalent to a respiratory death-rate of ·95 per thousand, which is considerably less than the figures—6 and 1·45 respectively—of the previous year.

Zymotic Mortality.

Only one death occurred from Zymotic disease—and that was Diarrhœa—giving a rate of mortality of ·23 per 1,000. In the year 1908 the deaths were 5, and the mortality rate 1·21 per 1,000.

Scarlet Fever.

During the year there were notified three cases of Scarlet Fever in three houses—two in June and one in November.

Although an exhaustive enquiry was made, no common source of infection nor connection between the three cases could be discovered. The premises where the disease occurred were all inspected by your officers, and the sanitary conditions were found to be satisfactory. Printed instructions which were issued to those in charge of the sick were in all the instances loyally carried out so far as circumstances would permit, and so prevented the spread of the disease.

Diphtheria.

One case of Diphtheria occurred in the district in October. This, although of a very serious type, had a favourable issue, owing, no doubt, to the use of the Anti-toxin Serum. Here I would suggest that the Local Sanitary Authority should supply gratuitously Anti-toxin in cases of Diphtheria, as its great cost often proves prohibitive. In taking this step the Council would be providing not only a curative but a preventive agent, and therefore safeguarding the public health.

In the case under consideration an inspection of the premises revealed the fact that a sewer-ventilator was in such a position as to permit of gaseous emanations gaining access to the bedroom through the open window. This ventilator was, on my recommendation, immediately removed and placed in a position where it could no longer prove a menace to the health of the inmates of the house.

Enteric Fever.

In view of the fact that this district has been very liable to outbreaks of Enteric Fever, your officers were particularly anxious to prevent if possible the recurrence of this disease. Happily no case was notified.

Erysipelas.

There was only one case of Erysipelas notified, which was of a very virulent character, but it happily terminated in recovery.

Of the notifiable diseases Erysipelas is one which is very rarely met with in this district.

Whooping Cough.

There was no epidemic of Whooping Cough during the year. The only cases which occurred were those in one household, the disease having been contracted at the seaside during the summer.

Chicken Pox.

Cases of Chicken Pox of a mild type came under observation during the autumn, but as this disease is not notifiable there were no means of ascertaining the number.

It is a pity that parents are not more particular with regard to isolating Chicken Pox than they are, for it was noticeable in almost every instance that not the least attempt had been made to prevent the sufferers carrying infection to others.

Diarrhoea.

There is one death to record as due to Diarrhœa. This case occurred in a child just above the age of one year, and was of a virulent type, death taking place within a very short period of the onset of the disease. Notwithstanding this fact, Diarrhœa was (so far as one can ascertain) by no means more prevalent than during previous years.

Influenza.

Influenza was the primary cause of four deaths. This disease, which had been more or less in evidence up to the middle of October, assumed from that time to the end of the year a far more epidemic character than on any of its previous visitations within my experience; and this opinion was confirmed to some extent by the abnormal drain upon the finances of several sick benefit societies

in the district. In very many cases cerebral and spinal irritation were marked, and convalescence was long and tedious.

Schools.

As the result of visits paid to the Non-provided and Council Schools, the yard in connection with the former was found to be untidy, and the walls of the schoolrooms in need of cleaning. These matters were brought to the notice of the authorities concerned and in due course remedied. In all other respects both schools appeared to be satisfactory. I should like to refer to the great improvement effected at the Council School by the asphalting and turfing of the playground adjoining Union Street. This, as well as the planting of shrubs, is an improvement from not only an aesthetic, but also a hygienic, point of view.

Isolation Hospital and Disinfection.

The small-pox hospital, which is the only isolation hospital for infectious diseases in the district, has fortunately not yet had to be used. Suggestions have been made that it should be let as a dwelling-house; but any such step in my opinion would be a very unwise policy, fraught with serious consequences, as such institutions ought to be held in perfect readiness for use when necessary.

Under the supervision of your Sanitary Inspector, the sick-rooms in connection with the cases of Scarlet Fever, Diphtheria, Erysipelas, and Phthisis, already referred to, were disinfected so far as the means at our disposal would allow, and in carrying this out the Spray Disinfector, recently purchased by the Council, was found to be of great assistance.

It is much to be regretted that the question of the provision of a Steam Disinfector, recommended in my last Annual Report, has been shelved on the score of expense. So long as this district remains without such an appliance it will be impossible to disinfect bedding and clothing effectually, and as a consequence the measures, both offensive and defensive, in dealing with serious infectious disease will be lacking in that thoroughness which present-day needs demand.

Water Supply.

The year 1909, I venture to say, will be impressed in the memories of the members of the Council by reason, of the failure of the water-works well and the difficulty experienced in obtaining a supply of water from other sources to meet the due requirements of the district.

Anxiety with regard to the town water-supply was expressed in my last Report, and after events proved that the apprehension was not without good foundation.

It may be of interest to briefly outline the history of the whole case. Since the month of May, 1908, the water-works well has exhibited unmistakable signs of failing, as indicated by the steady decline of the height of the water therein contained, but the unusually low rainfall at the time furnished, it was thought, a reasonable explanation of the same. On March 6th, 1909, the depth of the well water being so low as 6 feet 7 inches, it was deemed expedient to cut off the town supply daily from 9 p.m. to 5.30 a.m., but this economy was soon found to be insufficient and further curtailment of the supply continued to be made until by the month of October—when the rest level of the well was the lowest ever recorded, viz., 4 feet 9 inches, and the yield therefrom

15,000 gallons per day, and required pumping six times to furnish that quantity—the water was allowed to be on only for four hours a day and water for trade purposes was not supplied. At this period great difficulty was experienced in obtaining water for flushing purposes, and the private wells and eventually the brook near the Rothwell road had to be utilised by means of a small power pump, for which a temporary station was erected.

It was not until the 23rd of December that the town water was turned on full time and the inhabitants could again enjoy the benefits of an uninterrupted supply of water, the heavy rain-fall during October only now coming into effect. On December 31st, the depth of the well-water was 7 feet 10 inches, sufficient to yield 40,000 gallons a day.

It will be observed from a perusal of the foregoing that the Council could no longer disguise the fact that the water-works well was not to be relied upon as a source of water-supply for the town throughout the year. Accordingly an engineer was consulted with the view of obtaining an additional source of public water-supply. This matter is now in his hands, and it is to be hoped that a means of increasing the present water-supply will soon take tangible form, and will be utilisable, if not finished, by the advent of summer, in order to prevent the occurrence of an otherwise almost certain water famine which would prejudicially affect the public health in almost every particular.

To add to the difficulties connected with the scarcity of water, a sample of water from the water-works well,

sent in November to the Clinical Research Association was, on bacteriological examination, found to contain the Bacillus Coli. The drains and sewers in the neighbourhood of the water-works were thoroughly tested and the only result was the finding of a leak in the sewer along the Braybrooke road, too slight to account for the pollution of the water. At the same time some cows had obtained admission to the water-works field and deposited dung in the gulley sufficient to cause the contamination in question. Besides, on further investigation, the surface drains were found to empty themselves right into the old pit near the well. This was altered to make the surface water discharge over a gulley leading to the sewers so that there might be no fear of the well-water being polluted from this source.

The unsatisfactory character of the report of the water examination mentioned above was naturally the occasion of serious anxiety to the Council and officers, so that, as a precautionary measure, printed handbills were distributed, advising the inhabitants to boil all the water intended for drinking purposes or the cleaning of utensils. Happily there was not a single case of illness during the period referred to which could be due to any water infection.

Dwelling Houses and Over-crowding.

There were seven houses erected during the year. In spite of there being ample house accommodation for the parishioners there were two cases of over-crowding dealt with by your Inspector.

Excrement and Refuse Disposal.

In the course of inspections of the district it was frequently observed that the pans of the w.c.'s were not kept in a clean condition. This in some instances was pardonable, especially during the period of scarcity of water.

Public scavenging has been well carried out, the house refuse being deposited in a field near the Stoke road and there partly burnt. There is a tendency for the papers from this rubbish heap, particularly in windy weather, to be scattered about the field and adjoining road. This very objectionable state of affairs should be prevented by having the papers burnt at the time of desposit.

Several ashpits have been abolished and suitable movable receptacles substituted for them.

Sewerage and Sewage Disposal.

Your Inspector reports that the sewers generally are in good condition. In November, however, it was found necessary to scrape the sewer in Union street, where the fall is bad. Such scraping would probably not have been necessary had the Automatic Flusher in Rushton road been working, but the scarcity of water forbad its use. Notwithstanding this water famine the regular and effective flushing of the sewers was maintained, 1,940 loads of water being thus utilised. For this purpose the brook running through the Co-operative estate and crossing the Rothwell road supplied most of the water which was conveyed by the cart to the various localities as required. The annual flushing of the house-drains of the district by the men of the Council staff unfortu-

nately had to be abandoned, as the necessary water could not be spared from the mains.

The work on the Sewage Farm has continued to be carried out in a satisfactory manner, no fault having to be found with the state of the effluent. Land to the extent of $1\frac{1}{2}$ acres has been suitably prepared for the treatment of sewage, and it is arranged to dig and level a further portion of $2\frac{1}{2}$ acres. This work when completed will extend the area of land in use for irrigation purposes to a total of $6\frac{1}{2}$ acres.

The tanks and filters are in need of certain repairs and the latter also of cleaning. To increase the working capacity of the filter the Surveyor has recommended that a proper floor and ventilating pipes be provided. The construction of another filter, that the two might be in use alternately, is worthy of consideration. This would prove advantageous in many respects.

Inspections.

Systematic inspections of the whole district have been made by me during the year.

Slaughter-houses.

There are three slaughter-houses in the district all of which have been periodically inspected. One of these called for the constant attention of your Inspector, as in view of its position, accommodation, and general structure, a nuisance tends to arise owing to the large amount of work therein carried on.

The nuisances discovered, and in due course remedied in connection with these slaughter-houses were :—

Necessity for lime-washing—six ;
Accumulation of Manure—three ;
Untidy condition of salting room—one.

Dairies, Cowsheds and Milkshops.

The Dairies, Cowsheds, and Milkshops have been visited from time to time, and as regards cleanliness, ventilation and lighting, generally found satisfactory. The only cases which required the intervention of your Inspectors were two pertaining to the accumulation of manure, and three to the necessity for lime-washing.

It affords me very great pleasure to be able to refer to the excellent dairy, conforming to all modern requirements, erected during the year by the Co-oper- Society.

Factories and Workshops, (Bakehouses).

In the district there are nine factories of which six are devoted to the making of shoes, two of corsets, and one of cardboard boxes. The workshops number 25, and consist of slaughter-houses, bakehouses and other workshops.

The whole of the above have been regularly inspected both by your Sanitary Inspector and myself. In the case of the factories there was noticed a tendency for the pans, walls and floors of the w.c.'s to be kept in a dirty condition. Moreover, two cases of insufficient w.c. accommodation were notified by H.M. Inspector and afterwards remedied—one where only two w.c.'s were provided for 75 persons, and the other where the provision was but one w.c. for 50 females. The standard of accommodation now adopted is one w.c. to 25 persons.

I regret to have to report no improvement in the matter of the ventilation of factories and workshops, the employees taking every opportunity of obstructing all fresh air inlets.

There are seven bakehouses in the district with which no serious faults were found except the need of occasional lime-washing, always promptly attended to.

Food Supply.

It has not been found necessary to condemn any article of food exposed for sale. In view of the intimate relationship between bovine and human tuberculosis, all meat intended to be used for the food of man demands the most vigilant inspection.

Sanitary Inspector's Report.

The Sanitary Inspector's report furnishes proof that he has been active in guarding the interests of the public health, 192 nuisances having been reported, prominent among them being those relating to lime-washing, offensive accumulations, pig-styes, defective and insufficient ventilation of drains, blocked drains, and w.c. accommodation. Of this number 181 have been abated, and 11 are still to be dealt with.

It is satisfactory to note that only seven statutory notices were issued, and in no case was it necessary to take legal proceedings.

I am, Gentlemen,

Your obedient servant,

HENRY GIBBONS,

Medical Officer of Health.

TABLE I.—URBAN DISTRICT OF DESBOROUGH.

Year.	Population estimated to Middle of each year.	BIRTHS		Total Deaths Registered in the District				Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Nett Deaths at all Ages belonging to the District.	
				Under 1 Year of Age.		At all Ages.					
		Number	Rate	Number	Rate per 1000 Births Registered.	Number	Rate			Number	Rate
1	2	3	4	5	6	7	8	9	10	11	12
1899	3439	104	30·2	27	259	57	16·5			57	16·5
1890	3514	110	31·3	12	109	46	13·0			46	13·0
1901	3592	114	31·7	10	87	48	13·3			48	13·3
1902	3671	101	27·2	5	49	34	9·2			34	9·2
1903	3752	88	23·4	10	113	56	14·9			56	14·9
1904	3835	106	27·64	13	122	48	12·5			48	12·5
1905	3920	113	28·82	13	115	51	13·01			51	13·01
1906	4000	99	24·75	9	90	38	9·5			38	9·5
1907	4050	90	22·2	9	100	48	11·8			48	11·8
1908	4120	122	29·6	12	98·3	61	14·8		1	62	15·0
Averages for years 1899-1908.	3789	104	27·6	12	114	48	12·8		·1	48	12·87
1909	4200	121	28·8	16	132	48	11·42		2	50	11·9

Area of District in acres (exclusive of area covered by water.	2307	Total population at all ages... ...	3573	At Census of 1901.
		Number of Inhabited houses ...	748	
		Average number of persons per house	4·7	

Institutions outside the District receiving sick and infirm persons from the District:—Kettering Union Infirmary, Kettering Hospital, and Leicester Infirmary. Is Union Workhouse within the District? No,

TABLE III.—URBAN DISTRICT OF DESBOROUGH.

Notifiable Diseases.	Cases Notified in Whole District.						
	At all Ages.	Under 1 year.	1 to 5 years.	5 to 15 years.	15 to 25 yrs.	25 to 65 yrs.	65 and upw'ds
Diphtheria	1				1		
Erysipelas	1			1			
Scarlet Fever ...	3		1	2			
Totals	5		1	3	1		

Isolation Hospital: Only for Small-pox.

Number of diseases that can be concurrently treated } One, Small-pox.

TABLE IV.--URBAN DISTRICT OF DESBOROUGH.

Causes of Death.	Deaths in or belonging to whole District at subjoined Ages.						
	All Ages.	Under 1 year.	1 and under 5.	5 and under 15	15 and under 25	25 and under 65	65 and upwards
Epidemic Influenza	4				1	3	
Diarrhœa	1		1				
Enteritis	1	1					
Phthisis, (Pulmonary Tuberculosis) ...	2			1		1	
Other tuberculous diseases	3			1	1	1	
Cancer, malignant disease	3					1	2
Bronchitis	1						1
Pneumonia	3	2	1				
Premature Birth ...	1	1					
Heart diseases ...	5					1	4
Accidents	2	1				1	
All other causes ...	24	11	2	0	1	3	7
All causes ...	50	16	4	2	3	11	14

TABLE V.—Infantile Mortality during the Year 1909.

CAUSE OF DEATH.		Under 1 Week.	1—2 Weeks.	2—3 Weeks.	3—4 Weeks.	Total under 1 month.	1—2 Months.	4—5 Months	5—6 Months.	6—7 Months.	9—10 Months.	Total Deaths under One Year
All Causes	Certified	2	2	2		6	5	1	1	1	1	15
	Uncertified		1			1						1
Enteritis			1			1						1
Premature Birth ...		1				1						1
Atrophy, Debility, Marasmus ..				2		2	2	1	1	1	1	8
Convulsions ...			1			1						1
Pneumonia ...							2					2
Suffocation, overlying		1	1			1						1
Other causes ...			1			1	1					2
		2	3	2		7	5	1	1	1	1	16

Sub-division of Rothwell.

Population (estimated to middle of 1909) 4200.

Births in the year, legitimate, 120 ; illegitimate, 1.

Deaths in the year, of legitimate infants, 15 ; illegitimate infants, 1.

Deaths from ALL CAUSES AT ALL AGES, 50.

RAINFALL TABLE.

1909.	Total Fall Inches	Days on which 01 or more fell.	Average Rate of fall on Wet Days.	Greatest Fall in 24 hours	Date of Greatest Fall.
January ...	1·21	10	·121	·27	15th
February ...	·57	5	·114	·23	10th
March ...	2·79	22	·126	·92	6th
April ...	1·29	11	·117	·52	19th
May ...	1·49	9	·165	·81	25th
June ...	3·25	15	·216	·54	1st
July ...	2·75	16	·171	86	28th
August ...	2·24	14	·160	1·25	17th
September ...	2·14	19	·112	·26	28th
October ...	3·39	27	·125	·66	23rd
November ...	·69	13	·053	·17	29th
December ...	3·88	21	·184	·65	2nd
Totals	25·69	182			

Taken at Desborough Water-works, situate at 453 feet above ordnance

Administration of Factory and Workshop Act, 1901.

1.—INSPECTION.

Premises.	Inspections.	Written Notices	Prosecutions.
FACTORIES	16	12	Nil
WORKSHOPS	35	14	Nil
	51	26	

2.—DEFECTS FOUND.

Particulars.	Found.	Remedied	Referred to H.M. Inspector	Number of Prosecutions.
Want of cleanliness	12	12	Nil	Nil
Ventilation not maintained	8	—	,,	,,
Other nuisances	6	6	,,	,,
* Sanitary accommodation				
Insufficient	2	2	,,	,,
Unsuitable or defective	1	1	,,	,,
	29	21		

* Public Health Acts Amendment Act, 1890, has been adopted—One W.C to 25 persons

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.	Number.
Bakehouses	7
Slaughterhouses	3
Other workshops	15
Total number of workshops on Register	25

5.—OTHER MATTERS.

Class.		Number.
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s 5)	Notified by H.M Inspector	2
	Reports (of action taken) sent to H.M. Inspector.	2

No underground Bakehouses.

FORM 572.—Administration of

3.—HO

NATURE OF WORK.	OUTWORKERS' LISTS, SECTION 1						
	Lists received from Employers				Numbers of Addresses of Outworkers received from other Councils	Numbers of Addresses of Outworkers forwarded to other Councils	N... se... Occ... to k... sen...
	Twice in the year		Once in the year				
	Lists	Out-workers	Lists	Out-workers			
Wearing Apparel—							
(1) making, &c	16	310			6	4	

actory and Workshop Act, 1901.

WORK

Prosecutions		Number of Inspections of Outworkers' premises	Outwork in unwholesome premises, Section 108			Outwork in Infected Premises Sections 109, 110		
Failing to keep or permit inspection of lists	Failing to send lists		Instances	Notices served	Prosecutions	Instances	Orders made (S. 110)	Prosecutions. S. 109, 110
		130	10	13				Nil